



# MAXEY FLATS DISPOSAL SITE FLEMING COUNTY, KENTUCKY

## FACT SHEET UPDATE

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U.S. Environmental Protection Agency, Region IV, Atlanta, GA

October 2001

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The purpose of this Fact Sheet is to update the local community on the progress in the cleanup of the Maxey Flats Disposal Site. As you may know, Maxey Flats is a closed low level radioactive waste site that was operated from about 1963 to 1978. Figure 1 attached shows the location of the Site. We are pleased to report that there has been significant progress in the cleanup activities at the Site. Activities begun in 1997 to remove trench leachate, solidify it, and dispose of it in earth-mounded concrete bunkers were completed to EPA's satisfaction in the fall of 2000. The heavy construction associated with the primary component of the interim remedial phase, a 60-acre synthetic cap, surface water and erosion controls, was initiated shortly thereafter. This work is ongoing and currently scheduled to be completed by the end of 2002.

The Commonwealth of Kentucky performs maintenance and environmental monitoring at the Site under an EPA approved plan. Data collected routinely by the Commonwealth of Kentucky shows that Site controls continue to be protective of human health and the environment.

### **Community Involvement Activities**

For the past three years, EPA has conducted annual Public Open Houses at the Site to give the community an opportunity to observe activities and have questions answered on a one-to-one basis by the people performing the work. This year, due to heavy construction at the Site, EPA is issuing this Fact Sheet to help keep the community informed. In the fall of 2002, near completion of the interim cap construction, EPA will schedule another Open House to allow the community to see the construction progress, receive an explanation of site activities and have questions answered. EPA will publicize this Open House in order to maximize the opportunity for community involvement.

### **Leachate Removal, Solidification and Disposal**

Cleanup activities are being performed in two major phases. The first phase, which is currently underway as described above, is called the Initial Remedial Phase. This phase

is being performed by a group of industrial companies and funded in part by various governmental agencies. The Commonwealth of Kentucky is responsible for maintenance and environmental monitoring during the first phase. The industrial companies, governmental agencies and the Commonwealth of Kentucky are obligated to perform the work under Consent Decrees activated by the U.S. District Court in 1996.

The second major phase is called the balance of remedial phase and involves an extended maintenance period, construction of a final cap and care of the site in perpetuity. This phase of the cleanup will be performed by the Commonwealth of Kentucky.

Between 1998 and 2000, nearly 1,000,000 gallons of contaminated water or leachate was removed from the old disposal trenches. This water was solidified using cement and disposed in earth mounded concrete bunkers that were specially constructed on site. The primary contaminant in the leachate was tritium, which is a radioactive form of hydrogen. Dismantling of the systems used for trench water removal has been completed. Decommissioning of the solidification system will occur in conjunction with construction of the interim cap.

### **Interim Cap and Associated Surface Water and Erosion Control Construction**

The primary component of the interim remedy is the installation of a synthetic cap along with surface water drainage and erosion controls. The objectives for these elements are to minimize infiltration of rainwater into the disposal trenches, to route surface water away from the trenches and to minimize the potential for unacceptable erosion. The interim cap will cover approximately 60 acres (current cap covers approximately 35 acres) and involves placement of about 2,600,000 square feet of plastic liner and geotextile, and placement of about 350,000 cubic yards of fill dirt. The surface water controls incorporate plastic lined drainage channels around the site to route clean rainwater away from the disposal trenches and into a detention basin that serves as a single point of discharge for the interim cap. The discharge flow rate from this detention basin is controlled to minimize the potential for unacceptable erosion in the natural drainage channel down the hill on the eastern side of the Site. The drainage channel on the eastern part of the Site will be modified to minimize erosion potential.

This construction work is ongoing along with demolition of remaining site buildings. See Figure 2 attached for a view of the site upon completion of the initial phase construction.

### **Future Activities**

Following completion of the interim cap construction and associated work, the Commonwealth of Kentucky will implement an extended maintenance period that may last up to 100 years to allow natural stabilization of the disposal trenches. Once the

stabilization has occurred to EPA's satisfaction, the Commonwealth will construct a final multi-layered, engineered cap over the Site that includes vegetative cover. Following construction of the final cap, the Commonwealth will perform custodial and institutional control maintenance necessary to preserve the integrity of the remedy in perpetuity.

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The information repositories for the Maxey Flats Disposal Site are:

Fleming County Public Library  
303 South Main Cross Street  
Flemingsburg, KY 41041

Rowan County Public Library  
129 Trumbo Street  
Morehead, KY 40351

You may also wish to visit EPA's website at  
[www.epa.gov/region04/waste/npl/nplky/maxfltky.htm](http://www.epa.gov/region04/waste/npl/nplky/maxfltky.htm).

For further information concerning the Maxey Flats Disposal Site, please contact Derek Matory, EPA Remedial Project Manager at 404-562-8800, or Diane Barrett, EPA Community Involvement Coordinator at 1-800-435-9233 by phone, or by mail at U.S. EPA Region IV, Waste Management Division, North Site Management Branch, Sam Nunn Atlanta Federal Center, Tower-1 11th Floor (Mail Code: 4WD-NSMB), 61 Forsyth Street, SW, Atlanta, GA 30303-8960.